Mike Fisk

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EMPLOYMENT

Los Alamos National Laboratory ———————————————— **June 1996–Present**

Technical Staff Member, Network Engineering Group
Staff Researcher, RADIANT, November 1999–Present
Member of the Research & Development in Advanced Networking Technology (RADIANT) Team.

- High performance TCP optimizations
- Integration of grid computing into site security models
- Member, Cyber Security Technical Working Group, Department of Energy Office of the Chief Information Officer

Senior Architect, Network Security Team, June 1999–November 1999
Integrated Security Management project for the DOE Office of Defense Programs. Conducted a study of cyber security practices and postures at Integrated Security Management was a Defense Programs

- Member, Project Board
- Team Lead, Networks and Authentication Team
- Member, Architecture & Technical Solutions Teams

Senior Architect, Network Services Team, June 1996–June 1999
Researched, designed, implemented, and evaluated in-house and third-party software and hardware used to provide reliable security, authentication, directory, e-mail, and WWW services to 15,000 network users:

- Lead architect for the Unclassified Protected Network firewall.
  Earned a Distinguished Performance Award.
- Network security advisor & strategist for numerous projects involving multiple agencies.
- Enterprise authentication system design
- Linux kernel modifications supporting specialized network services and architectures
- Security Incident Response Team (SIRT) member
- Member of the Computer & Network Security Team of the Lab Information Architecture project

Institute for Defense Analysis ———————————————— **June 2001–Present**

Adjunct Staff Researcher, Center for Computing Sciences

New Mexico Tech Computer Center ———————————————— **November 1993–May 1996**

Systems Programmer, Academic Computing
Member of a small systems administration team responsible for campus-wide computing services including over 200 shared workstations of various flavors. In addition to general administrative duties, I lead the development of automated network system administration, bug reporting & tracking systems, and WWW services.

Los Alamos National Laboratory ———————————————— **May 1995–August 1995**

Network Services Team, Network Engineering Group
Responsible for the design and implementation of custom and third-party software and systems to provide enterprise network services to 15,000 network users. My projects included integrated directory services, web and e-mail services, and automated system administration and configuration management.

Los Alamos National Laboratory ———————————————— **May 1993–January 1995**

ICN Consulting Office
Employed full-time on summer and winter breaks (4 months/year) as a member of the ICN Consulting Office, a user support center for scientific computing. I also worked on several software development projects including early Gopher and WWW applications.

University of New Mexico ———————————————— **September 1990–June 1991**

Intern, **Physics and Astronomy Department**
Radio interferometry signal processing on Sun and VAX-VMS machines using the NRAO's AIPS software package.

PUBLICATIONS

Contributing author of 'Security for Collaborations in Open, Scientific Computing Environments,' report of the DOE Workshop on Security in Open, Scientific Computing Environments, Chicago, January 2001 (in progress).

M. Fisk, W. Feng, *TCP Flow-Control Adaptation for Computational Grids*, Submitted to Supercomputing 2001.

M. Fisk and G. Varghese, *Fast Content-Based Packet Handling for Intrusion Detection*, submitted to ICNP 2001.

G. Fisk, M. Fisk, and C. Papadopoulos, *Minimal Requisite Fidelity: Securing Networks with Active Wardens*, submitted April 2001 to New Security Paradigms Workshop 2001.

M. Fisk, 'Network Service Availability and Performance,' chapter in *Enterprise Networking: Multilayer Switching and Applications*, edited by V. Theoharakis & D. Serpanos, Idea Group, to be published Fall 2001.

M. Fisk and W. Feng, *Dynamic Adjustment of TCP Window Sizes*, LAUR 00-3321, revised December 2000.

M. Fisk, *An End-to-End Session Layer for Realm-Specific Networking*, IETF draft-fisk-midcom-session-00, November 2000.

M. Fisk and W. Feng, *Interactions of Realm Boundaries and End-to-End Network Applications*, LAUR 00-3631, May 2000.

M. Fisk, *WWW Kerberos Authentication*, August 1998.

M. Fisk, *Automating the Administration of Heterogeneous LANs*, Proceedings of the Tenth Conference on Large Installation System Administration, USENIX Association, October 1996.

Talks

Middlebox Communications, IETF49, December 2000.

High Performance Networking, Extreme Linux session, Linux Expo 1998.

Life with Automated Configuration & Installation, Tenth Conference on Large Installation System Administration, USENIX Association, October 1996.

EDUCATION

Ph.D. Student, University of California San Diego, Computer Science and Engineering Dept.
> Student of Dr. George Varghese
> MICRO Fellowship
> Research focus: Network Intrusion Detection

M.S. in Computer Science, University of California San Diego, expected June 2001

Computer Science graduate course work, Stanford, Fall 1998

B.S. in Computer Science, New Mexico Institute of Mining & Technology
> Graduated May 1996 with Highest Honors
> GPA: 3.8/4.0 cumulative, 3.8/4.0 in Computer Science
> Tech Scholar; Eugene O'Connor Award for highest graduating GPA in department
> Presidential & National Merit Scholarships

Active DOE Q Clearance, DOD TS/SCI in progress.
References & transcripts available upon request.